

REMARKS/ARGUMENTS

As an initial, in view of the maintained obviousness rejection and the as-filed RCE, Applicants would like to formally request an interview with the Examiner to further discuss the application, claims, and pending obviousness rejection. Applicants' representative can be contacted at the number listed below for arrangement of the interview at the Examiner's earliest convenience.

Reconsideration of the claimed invention is requested in view of an interview and the following remarks.

Claim Rejections Under 35 U.S.C. § 103

The rejection of claims 20, 24, 35, 37, 50, 51, 53-55 under 35 U.S.C. § 103(a) as obvious over Leung (US 2002/0137260) in view of Matijev (US 5,900,223), and the rejection of claim 54 under 35 U.S.C. § 103(a) as obvious over Leung (US 2002/0137260) in view of Matijev (US 5,900,223) as applied to claim 37 and further in view of Yokouchi (US 5,143,637) are traversed for reasons of record and the remarks discussed below.

In the Final Office Action (Response to Arguments), the Office asserts that “a ‘product by process’ claim is directed to the product per se, no matter how actually made.” The Office further asserts that Applicants have merely distinguished the present claims on the basis of a process and not the structure. Present Final Office Action at pages 7 to 8.

However, Applicants point out that: **1)** there are several components of the claims that do not recite or include any descriptions of a process; **2)** a discussion of these features and how they distinguish over films in the cited references has been presented throughout the prosecution history of the present application, including the nanoparticle diameter size and narrow grain-sized distribution; **3)** as understood by those skilled in the art, the deposition of/process by which the claimed dielectric film (or any film) is made is clearly a factor in the outcome, components, and properties of the film produced; **4)** the organic solvent is evaporation after heating and depositing of the nanoparticles is only mentioned in claim 37; and **5)** the Office has not provided any references that describe any dielectric thin film with relative dielectric constant greater than 10 consisting essentially of the combined components, exclusive of the any aspects of any process.

For the Office's convenience, claim 37 is reproduced below.

37. (Presently amended) A dielectric thin film with relative dielectric constant greater than 10 consisting essentially of:
a solution or dispersion of surfactant-coated nanoparticles in an organic solvent,
wherein said organic solvent is evaporated after heating and depositing said nanoparticles on a substrate to form said dielectric thin film,
wherein said nanoparticles have a diameter size in a range between 2 nm and about 20 nm, and a crystalline structure having a relatively narrow grain-sized distribution,
wherein said narrow grain-sized distribution has a standard deviation selected from the group consisting of: less than 15%, less than 10% and less than 5%.

As previously pointed out, Leung does not describe, *inter alia*, any surfactant-coated nanoparticles. Similarly, Matijev does not describe surfactant coating (or relate to the matrix material infiltration Leung) that would result in the claimed dielectric thin film having the above-recited components. Regarding Yokouchi, the reference relates to a low-viscosity magnetic fluid, in which one skilled in the art would not look to or rely on such a disclosure to cure the deficiencies of any of the references.

Therefore, as claim 37 and the claims dependent thereon are clearly unobvious, maintaining rejection is improper. Accordingly, withdrawal of the rejection is requested.

In view of the above remarks, Applicants believe the pending application is in condition for allowance.

Applicants' representative looks forward to discussing the application with the Examiner to further advance prosecution and allowance of the pending application.

Applicants believe no fee, other than the RCE fee, is due with this response. However, if an additional fee is due, please charge our Deposit Account No. 50-0510, under Order No. 20140-00343-US2 from which the undersigned is authorized to draw.

Dated: September 4, 2008

Respectfully submitted,

Electronic signature: /Bryant L. Young/
Bryant L. Young
Registration No.: 49,073
CONNOLLY BOVE LODGE & HUTZ LLP
1875 Eye Street, NW
Suite 1100
Washington, DC 20006
(202) 331-7111
(202) 293-6229 (Fax)
Attorneys for Applicant